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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,993	08/27/2003	David J. Schneider	P755-2/HSCH 200007US01	4365
27885	7590	03/05/2010	EXAMINER	
FAY SHARPE LLP 1228 Euclid Avenue, 5th Floor The Halle Building Cleveland, OH 44115			ANDERSON, JAMES D	
			ART UNIT	PAPER NUMBER
			1614	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/648,993	Applicant(s) SCHNEIDER, DAVID J.	
	Examiner JAMES D. ANDERSON	Art Unit 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-48, 50 and 52-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-48, 50 and 52-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Formal Matters

Applicants' response and amendments to the claims, filed 1/8/2010, are acknowledged and entered. Claims 43-48, 50, and 52-59 are pending and under examination.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/8/2010 has been entered.

Response to Arguments

Applicants' arguments have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Claim Rejections - 35 USC § 103 – New Ground of Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 43-48, 50, and 52-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Arsem** (USP No. 2,472,361; Issued June 7, 1949) and **Marks et al.** (USP No. 2,817,621; Issued Dec. 24, 1957) in view of **Katzen** (USP No. 4,369,199; Issued Jan. 18, 1983) and **Watson et al.** (Biological Control, January 2001, vol. 20, pages 8-15).

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The instant claims are drawn to treating an animal habitat with trichloromelamine such that the pH is lowered to less than 5. Applicants disclose that such treatment has “indirect insecticide properties” and thus can be used to control Darkling beetles.

Arsem discloses the claimed trichloromelamine (Table at col. 7) and teaches that highly halogenated substances such as trichloromelamine are useful as disinfectants and bleaching agents (col. 7, lines 25-35). The invention of Arsem is directed to methods of making trichloromelamine and thus does not disclose treating animal habitats with the compounds of the invention.

Marks discloses compositions for germicidal or disinfecting purposes comprising N-chloro compounds and iodide (col. 1, lines 16-21; col. 2, lines 34-49). Trichloromelamine is a particularly preferred N-chloro compound for use as a germicidal or disinfectant (col. 5, lines 26-27). Marks discloses that the germicidal and disinfectant compositions are preferably employed at a **pH below 5** by using buffering agents such as citrate in of an acid salt (col. 5, line 74 to col. 6, line 25). Also see Example I wherein a composition comprising trichloromelamine, arylalkyl sulfonate, citric acid, monosodium dihydrogen phosphate, and potassium iodide is disclosed. Marks discloses a range of concentration of disinfectant in aqueous solution so as to provide from **50 to 200 ppm** of available chlorine (col. 9, line 70 to col. 10, line 5).

Thus, both Arsem and Marks disclose trichloromelamine as a suitable disinfectant and Marks further discloses the use of compositions comprising trichloromelamine as germicides. Neither Arsem nor Marks discloses treating animal habitats with trichloromelamine.

However, Katzen discloses treating animal or poultry waste contained in a dropping pit or sedimentation tank of an animal or poultry confinement or holding pen with a sufficient amount of an acid to achieve and maintain the animal or poultry waste at a **pH of about 4** (Abstract). Also, Katzen discloses treating animal or poultry bedding with an acid to maintain a pH of about 4 (id.). The treatment eliminates the problems of giving off of unhealthy gases and the growth of pathogens in the environment (Abstract; col. 2, lines 28-33; col. 4, lines 39-45).

As evidenced by Watson *et al.*, the darkling beetle is a “common pest” of chicken and turkey houses and “all life stages” are found in poultry litter and manure where they feed on manure, litter, meal, dead birds, and other insects (page 8, right column, second full paragraph)

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It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to use a composition comprising trichloromelamine and citric acid as disclosed in Marks to treat animal waste and/or bedding so as to maintain the waste and/or bedding at a pH of about 4 as taught in Katzen. The skilled artisan would expect that such treatment would not only eliminate unhealthy gases and the growth of pathogens as taught in Katzen, but would also have disinfectant and germicidal properties as taught in Arsem and Marks. It is well established in the art that animal housings and bedding are in need of disinfecting and thus treatment of such housings and bedding with a disinfectant solution would have been obvious to one skilled in the art at the time the invention was made. Because compositions comprising trichloromelamine were known to have both disinfectant and germicidal properties when used at or below a pH of 5, the skilled artisan would have been motivated to use such compositions for treating an animal habitat, including waste and bedding as disclosed in Katzen.

Marks discloses the use of compositions comprising trichloromelamine as disinfectants and germicides, wherein the compositions are maintained at a pH below 5. As such, use of such compositions in the methods of reducing the pH of animal waste and/or bedding to below about 4 as taught in Katzen would have been *prima facie* obvious to one skilled in the art at the time the invention was made.

With regard to claim 47, which recites treatment by dusting the habitat with powdered trichloromelamine, the skilled artisan would expect that dusting a habitat with trichloromelamine would maintain the disinfectant and germicidal properties of trichloromelamine as taught in Arsem and Marks. As such, this method of application of trichloromelamine is not seen as a patentable distinction over the cited prior art.

Response to Arguments

Applicant's arguments have been carefully considered but they are not deemed to be persuasive. Applicant argues that the preamble of independent claim, "controlling Darkling beetles" must be given patentable weight. The Examiner previously stated that the presence of Darkling beetles is not required because Applicant states in the specification that the claimed method has "indirect" insecticidal properties in which "the formation and growth of the Darkling

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beetle will not occur” (page 9, line 20 to page 10, line 2). As such, "controlling" Darkling beetles encompasses an embodiment in which Darkling beetles are not present prior to trichloromelamine application.

Applicant has added new claims 52-59 which add the limitation that Darkling beetles are present in the animal habitat prior to the treatment step. However, as evidenced by Watson *et al.*, the darkling beetle is a “common pest” of chicken and turkey houses and "all life stages" are found in poultry litter and manure where they feed on manure, litter, meal, dead birds, and other insects (page 1, right column, second full paragraph). As discussed supra, Arsem and Marks *et al.* in view of Katzen suggest and motivate the treatment of animal waste and/or bedding so as to reduce the pH to below about 4 to eliminate the problems of giving off of unhealthy gases and the growth of pathogens in the environment. A composition comprising trichloromelamine having germicidal or disinfecting properties is disclosed in the cited prior art and is preferably employed at a pH below 5. As such, treatment of a poultry animal waste and/or bedding with a composition comprising trichloromelamine as suggested and motivated by the cited prior art will naturally result in the claimed effect of “controlling Darkling beetles”. As evidenced by Watson *et al.*, such poultry waste and/or bedding will also naturally contain the "common pest", Darkling beetles.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES D. ANDERSON whose telephone number is (571)272-9038. The examiner can normally be reached on MON-FRI 9:00 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James D Anderson/
Examiner, Art Unit 1614